

AMENDMENT

In the Specification:

Please replace paragraph [0046] beginning on page 14 with the following rewritten paragraph:

[0046] An example of the Taq polymerase stop assay is described in Han, *et al.*, *Nucl. Acids Res.* (1999) 27:537-542, which is a modification of that used by Weitzmann, *et al.*, *J. Biol. Chem.* (1996) 271:20958–20964. Briefly, a reaction mixture of template DNA (50 nM), Tris·HCl (50 mM), MgCl₂ (10 mM), DTT (0.5 mM), EDTA (0.1 mM), BSA (60 ng), and 5'-end-labeled quadruplex nucleic acid (~18 nM) is heated to 90°C for 5 minutes and allowed to cool to ambient temperature over 30 minutes. Taq Polymerase (1 µl) is added to the reaction mixture, and the reaction is maintained at a constant temperature for 30 minutes. Following the addition of 10 µl stop buffer (formamide (20 ml), 1 M NaOH (200 µl), 0.5 M EDTA (400 µl), and 10 mg bromophenol blue), the reactions are separated on a preparative gel (12%) and visualized on a phosphorimager. Adenine sequencing (indicated by "A" at the top of the gel) is performed using double-stranded DNA Cycle Sequencing System from Life Technologies. The general sequence for the template strands is TCCAACATGTATAC (SEQ ID NO:17)-INSERT-TTAGCGACACGCAATTGCTATAGTGAGTCGTATTA (SEQ ID NO:18), where "INSERT" refers to a nucleic acid sequence comprising a quadruplex forming sequence (See *e.g.*, Table A). Bands on the gel that exhibit slower mobility are indicative of quadruplex formation.

Please replace paragraph [0052] beginning on page 16 with the following rewritten paragraph:

[0052] The following is a specific example of the assay embodiment. A 5'-fluorescent-labeled (FAM) primer (P45, 15 nM) was mixed with template DNA (15 nM) in a Tris-HCL buffer (15 mM Tris, pH 7.5) containing 10 mM MgCl₂, 0.1 mM EDTA and 0.1 mM mixed deoxynucleotide triphosphates (dNTP's). The FAM-P45 primer (5'-6FAM-AGTCTGAC TGACTGTACGTAGCTAATACGACTCACTATAGCAATT-3') (SEQ ID NO:19) and the template DNA (5'-TCCAACATGTATACTGGGGAGGGTGGGGAGGGTGGGGAAGGTT

AGCGACACGCAATTGCTATAGTGAGTCGTATTAGCTACGTACAGTCAGTCAGACT-3')
(SEQ ID NO:20) were synthesized and HPLC purified by Applied Biosystems. The mixture was denatured at 95°C for 5 minutes and, after cooling down to room temperature, was incubated at 37°C for 15 minutes.